

The new energy grid in Capri

Capri will be electrically connected to the mainland for the first time

The project Terna is implementing in Capri is historically important: it is the first direct connection between the island and the mainland. With an investment of over 100 million euros, Terna is building a power line with a 150 kV AC cable 31 km long (30 submarine + 1 on land), and an innovative power station at the ecological island of Gasto in Capri, with a low environmental impact and sustainable design.

The connection will involve the Municipalities of Capri and Torre Annunziata.

Advantages

- Greater safety, continuity and quality in the electricity service and increased reliability of the electricity system, thanks to 4 million kWh/year less of non supplied energy.
- Savings of at least 17 million euros a year in electricity, to the advantage of businesses and communities.
- Work for 40 businesses, among which international energy giants such as Prysmian (with a plant in Arco Felice), Getra, Salvati and Abb, and 300 workers totally employed.
- Reduction in CO₂ emissions into the atmosphere for nearly 130 thousand tons a year.
- Protecting the marine eco system thanks to the use of a low environmental impact cable easy to operate for building the connection (XLPE technology, cross-linked polyethylene insulated).

Objectives

- Increasing safety and reliability in the electricity supply for the Island of Capri with the aim of minimizing blackout risks especially in the summer months when tourism and consequently consumption increase.
- Minimizing blackout risks, mainly in the summer months.
- Significantly rising the quality standards of the electricity service.

Data

- Length of the marine segment: 30 km
- Maximum depth of the marine segment: nearly 120 meters
- Nominal system voltage: (150 kV)
- Length of the land segment: 1 km
- Investment: over 100 million euros

Authorization process

Terna's project for Capri is the result of a 6-year consultation process that involved the Company and local and national authorities. These are the principal steps:

- November 9, 2012: authorization obtained for the 150 kV submarine cable power line "Capri-Torre Annunziata" and for the new 150 kV power station in Capri.
- May 16, 2009: Terna submitted its feasibility study for the infrastructure to the Municipality of Capri.
- May 3, 2009: the Strategic Environmental Assessment begun; April 30, 2010: authorization process initiated for the "Capri-Torre Annunziata" line.
- September 23, 2008: Terna presented the initial results of the feasibility study carried out during the year to the Ministry for Economic Development.
- May 2008: technical surveys carried out on possible landing sites/land segments.

- November 5, 2007: the Campania Region requested Terna to assess the opportunity of connecting Capri, and more generally the Campania islands, to the National Transmission Grid.
- October 6, 2007: the Municipality of Capri requested to connect the island to the National Transmission Grid.

Project figures

- ✓ Over 100 million euros of investments
- ✓ 31 km the total length of the connection (of which 30 submarine)
- ✓ At least 17 million euros a year saved in the electricity system
- ✓ 4 million kWh a year of grid losses
- ✓ 130 thousand tons of CO₂ emissions less a year
- ✓ 2,700 sq. m. the area of the power station in Capri
- ✓ 540 sq. m. the size of the main power station building in Capri
- ✓ 300 workers totally employed
- ✓ 40 businesses involved
- ✓ 120 the maximum depth approximately reached by the submarine cable